

## Fructose 1,6-bisphosphatase from Human, Recombinant

Cat. No. NATE-1576

Lot. No. (See product label)

### Introduction

**Description** Fructose 1,6-bisphosphatase (FBPase; EC 3.1.3.11) is an enzyme in the liver that converts fructose-1,6-bisphosphate to fructose 6-phosphate in gluconeogenesis. Fructose bisphosphatase catalyses the reverse of the reaction which is catalysed by phosphofructokinase, which is involved in the process of glycolysis. These enzymes only catalyse the reaction in one direction each, and are regulated by metabolites such as fructose 2,6-bisphosphate so that high activity of one of the two enzymes is accompanied by low activity of the other. It is involved in many different metabolic pathways and found in most organisms. FBPase requires metal ions for catalysis ( $Mg^{2+}$  and  $Mn^{2+}$  being preferred) and the enzyme is potently inhibited by  $Li^{+}$ .

**Synonyms** Fructose-bisphosphatase; EC 3.1.3.11; FBPase; Hexose diphosphatase

### Product Information

**Species** Human

**Source** E. coli

**Form** Liquid. Storage Buffer: 50 mM potassium phosphate pH-7.4, 50 mM sodium chloride, 0.5 mM ethylenediaminetetraaceticacid, and 2.5% glycerol.

**EC Number** EC 3.1.3.11

**Molecular Weight** 36.8 kDa

**Purity** > 90% (densitometry)

**Activity** 1525 pmol/min/ug

**Unit Definition** One unit is defined as the amount of enzyme that will convert 1 nmol of NADP to NADPH at 30 °C.

### Storage and Shipping Information

**Storage** Stable for > 6 months at -80°C